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ABSTRACT

The function of speech and its implications for studying, understanding, and promoting language development are explored in this paper. Function is considered to be the purpose of the speaker when speaking, variously termed context of situation, situation, context, circumstance, or mode. It is noted that very few studies of speech and speech development have looked at the function of speech, but those that have found differences in amount of speech and sophistication of speech depending upon the function. The need to obtain multiple samples of speech for evaluation, including samples of speech used for different purposes, is emphasized. (MHM)

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FUNCTION AS A DETERMINANT OF SPEECH PRODUCTION

- IMPLICATIONS FOR LANGUAGE DEVELOPMENT

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OF THE ARTS AND EDUCATION

TRANSACTION, LOCUTION AND FUNCTION

1 *Complexity of Speech*

Speech, we all know, is a complex behaviour, as there are multiple axes of variation within speech which control any speech act.

The complexity of speech is made even more difficult to study because there is little consistency in the nomenclature which investigators use for their key referents. When a particular word has different meanings from passage to passage in the same study, and when this word has different meanings in different studies, one tends to experience semantic confusion, and results from studies are obfuscated.

2 *Inconsistency of Key Referents*

We are usually told what kind of speech is being studied in an investigation (say, a talk), but we are not always told the prime purpose for which the speech is given (e.g. to explain, to persuade, or to describe) and purposes may differ from study to study without our being aware. Consequently, we may expect results from what we think are similar investigations to be similar, or closely correlated and are surprised that there are such discrepancies from one to another. Very often, in fact, the studies have not been concerned with the same speech production. Rarely is function (the purpose of the speaker when speaking) distinguishable from, or clarified within, the total speech act, or what is often called the "context of situation" (but is variously termed "situation", "context", "circumstances", "mode").

The purposes of speech (e.g. to narrate, or to explain) may change in a study without our being made aware of the changes.

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As an example of the way in which key referents are used ambiguously, I refer you to the study by Denis Lawton (1968)¹ one of the few researchers to investigate kinds of speech (description and abstraction). He uses both "*context*" and "*situation*" to refer to the two kinds of speech (discussion and interview)¹ - pages 118, 127, 139). He also uses these two words for the purpose (description and abstraction). He also uses the words "*sequences*", "*sectors*", "*passages*" and "*tasks*" to refer to the purposes. In his summarised conclusion he says :

"In future studies it would be advisable to collect samples of speech and writing from as many different contexts as possible. Previous studies have tended to assume too much on the basis of a limited number of contexts".

Page 142

As Lawton (1968) analysed two kinds of speech and two purposes within the personal interview (description and abstraction) the term "*context*" here is ambiguous. It is not clear whether Lawton means we should investigate many different kinds of speech (a talk, conversation, etc.) or many different purposes (persuasion, explanation, hypothesis, etc.) or, as is most probable, kinds and purposes combined.

3 *Transaction, Locution and Function - Definitions*

You will probably recall that Humpty Dumpty said that the words he used meant what he wanted them to mean. I'm similar to him in some respects. Some words that I shall use in this paper mean what I want them to mean. So, I will define my meanings to you, as they are pivotal to what I have to say.

In this paper *Transaction* refers to a total speech act - excluding subject matter, register and personal style. *Transaction* refers then to the person who is speaking, to whom he is speaking, when and where he is speaking, how he is speaking (extempore or prepared, for example) why he is speaking and what relationship exists between the speaker and his audience, indicated by the degree of formality or informality between them. Certainly complex! *Locution* refers to the kind of speech in the transaction e.g. a conversation, a lecture or a discussion and *function* refers to the prime purpose the speaker has when he speaks e.g. to persuading, to inform or phatic communion. Let me take an example : a prepared, rehearsed, uninterrupted talk (locution) to persuade (function) a large group of academics, assembled in a spacious hall, given in relatively formal circumstances, as part of a conference on oracy in education (the transaction).

4 *Analysis of Speech*

Obviously, *locution* and *function* are cardinal determinants of speech production in any transaction - and there are many locutions and functions possible. I draw your attention to the fact that in order to analyse any person's *total* speech ability, his *competence* and his *production*, an almost infinite number of speech situations calling for multiple functions, both formal and informal, would have to be devised. The multiplicity of inter-dependent and interacting variables, cognitive, affective and social would have to be discretely extrapolated - which would be an impossible task - even for a large team of researchers engaged on a longitudinal study. All one researcher can do is to analyse certain major elements in speech that can be objectified and measured within the limits of his own clearly defined terms and strategies in as many locutions, with as many functions, as is feasible.

Rashly, generalisations about speech production as a whole have been made from results obtained from only one locution, where function has been ignored. Bernstein's theories of restricted and elaborated codes, for instance, are based on findings from one locution only - group discussion (1962a, 1962b)². If one considers only the multivariate functions of speech possible (such as self-assertion, phatic communion, threat, commands, criticism, description, persuasion, praise, explanation, hypothesis, summary) the dangers of making global generalisations on speech performance, based on a single locution with a single function become manifest. Yet many studies of speech do not emphasise sufficiently the fact that their results are applicable only to specific functions in particular locutions.

5 *The Linguistic Correlates of Specific Transactions, Locutions and Functions*

That there is a co-occurrence of specific phonological, lexical and grammatical features with each locution and each function, and that there is variance in the frequency of these features from one locution and function to another are supported by research evidence.

Goodenough (1938)³ studied children's use of pronouns in different locutions and found :

"....a distinct difference in frequency of usage according to the immediate situation under which they are used..."

Page 338

Young (1941)⁴ collected samples of language from nursery-school children when they were playing outdoors, indoors, at dinner, and during a period when they were looking at picture books. It was found that the transaction had a marked relation to the amount of language obtained in ten-minute periods of

observation. It was not reported, however, whether there were differences in locution or function from transaction to transaction. Fischer (1964)⁵ tape-recorded the speech of 12 boys and 12 girls aged 3 to 6 years and 7 to 10 years, in order to study linguistic variants. He found that all the children used the participial suffixes "in" and "ing" (as in "fishin" and "studying") to some extent. These allomorphs varied with the topic talked about and with the degree of formality in the relationship between the speakers. The suffix "in" increased with the formality of the relationship and there was a trend for "formal" verbs (e.g. to study) to have "ing" suffixes and "informal" verbs (e.g. to fish) to have "in" suffixes.

A striking indication of the effect of transaction on speech production is provided by contrasting the studies of Strickland (1957)⁷. Strickland encouraged 6 year old children to speak in her presence; Strang & Hocker collected samples of the autogenous speech of 6 year old children engaged in their daily activities. The same analytical methods were used in both studies and significant differences were found between them. The mean sentence length, for instance in Strickland's study was 11 words, in Strang and Hocker's study it was 5 words. Opie & Opie (1959)⁸ found that children's language is different in structure and content when talking to other children from that when they are talking to adults.

In her study of the speech of university students, Goldman-Eisler (1961)⁹ found that the amount and the quality of speech were determined by the locution. She says :

"The greater fluency in general discussion is thus a reflection of the fact that the situations are not conducive to verbal planning of as high a quality as those in which speakers are allowed to soliloquise."

Page 224

Lawton (1968)¹ had similar findings. In his study of the speech of boys 12 years and 15 years he discovered that the speech produced in personal interviews was more complex than that produced by the same boys in group discussion.

Different functions have also been found to produce specific linguistic correlates. Goldman-Eisler (1961)⁹ presented New Yorker cartoons to university students and asked them first to describe what was drawn in the cartoons and then to state the point of the cartoons. She found that expressing the point of a cartoon is more difficult than describing it and there is a concomitant difference in the language produced for the two functions. In analysing hesitation phenomena (filled purposes and then filled pauses), she found that the length of pauses was over twice as great when her

subjects expressed the point of the cartoon and when they described it, and she concluded that the major hesitations in speech appear to reflect and indicate the need to make semantic and conceptual decisions. Lawton (1968)¹ also found that the function of abstraction is more linguistically complex than that of description. Analysing samples of boys' speech from personal interviews, he found that there was a consistent pattern of differences according to whether the sequence of answers to his questions required description or abstraction. He found that there was :

"....clear tendency for boys to use more subordinate clauses and more complex constructions in the abstraction than in the description passages."

Page 139

Wilkinson (1971)¹⁰, reporting some findings from the Oracy Research Unit at Birmingham University, states the subjects giving a *commentary* scarcely scored on a modified index of subordination, but the same subjects had high scores on this feature when *reporting* on a television excerpt. (page 118)

A study by Henderson¹¹ in 1970 emphasised the significance of function in speech. She interviewed 110 five-year old children individually and gave them two tasks involving narration of a story from picture-story cards and explanation of what was happening in certain pictures (trobin cards). The speech of the children in response to formal questions and problems was recorded. An analysis of four form-classes in the speech revealed that "...the use of different nouns (the types) and the frequency with which nouns were used (the tokens) was dependent upon a specific task." ... "In the case of token verbs and type adverbs the overall sample distribution shows that the use of these two form-classes appears to be independent of the task." (page 88) It was found that explanation produced a larger frequency of form-classes than did narration. Henderson¹¹ emphasises "the selective function of contexts upon form-class usage and raises the question of the selective function of context upon grammatical and lexical choices." (page 90)

6 The Need to Obtain Multiple Samples of Speech for Evaluation Purposes

Wittgenstein (1953)¹² emphasised there are many kinds of what he calls "discourses" (*locutions*) within a language, and drew our attention to the fact that the meaning of a specific speech act cannot be completely understood except in terms of the purpose of the speaker (*function*) and the total context (*transaction*) in which the speech act occurs. Chomsky (1964)¹³ discussing not only the children's grammatical production but also their grammatical competency, stresses the need for collecting a large corpus of evidence concerning the children's grammar before we are able to determine their developmental capabilities. He writes :

"If anything far-reaching and real is to be discovered about actual grammar of the child, then rather devious kinds of observation of his performance, his abilities and his comprehension in many different kinds of circumstances will have to be obtained, so that a variety of evidence may be brought to bear on the attempt to determine what is in fact his understanding of linguistic competence at each stage of his development."

Page 36

McCarthy (1954)¹⁴ and Carroll (1964)¹⁵, both educational researchers of some eminence, consider that it is essential to obtain multiple samples of language to estimate not only grammatical ability but language ability as a whole, so that one is in a position to make reasonably accurate predications about how various speakers and writers are differentiated. McCarthy (1954)¹⁴ states :

"It is extremely important ...in comparing language studies and in setting up experimental situations for future investigations to control the situations with great care, to make comparisons only of situations which have been shown to be comparable, and to generalise regarding language development only for the specific situations in which the data have been collected. Apparently there are sufficient differences in the same children's use of language from one situation to another to make it extremely hazardous to infer that a given sample is representative of a child's language development in general."

Page 596

Carroll (1964)¹⁵ advises us to avoid the hazard of oversimplification and over-generalisation by sampling widely :

"In studying differences in language ability.. we should start with the widest possible sampling of language performance and see whether there are any systematic ways in which members of a speech community vary with respect to these performances."

Page 67

That the advice offered by eminent philosophers and educationists has not been taken by many researchers is obvious from research evidence. Barnes (1971)¹⁶ takes psychologists to task when he writes :

"Psychologists research in the development of children's language ... have assumed almost unanimously either that context of situation could be ignored, or that an example from one context could reasonably be taken to represent all."

Page 244

7 *Neglect of Locution and Function*

This is not to say that locution and function have been completely neglected. During the last five years some studies (Lawton 1968¹, Henderson 1970¹¹, Coulthard 1970¹⁷, for example) have been acutely aware that locution and function are probably the most significant elements in a speech transaction. However, function has been comparatively neglected in research work.

One reason for this neglect may be that it is very difficult to control function. A speaker may, for instance, narrate, describe, explain and persuade in one locution (say, a talk), as one function over-laps another. Function is, in fact, (as is locution to an extent) an ideal-type construct. Many repertoires of function have been postulated, such as the following :

- | | |
|-------------------------------|--|
| BUHLER (1933) ¹⁸ | - emotive (expression), conative (persuasion), referential (description) |
| JAKOBSON (1960) ¹⁹ | - emotive, conative, referential, phatic, poetic and metalingual |
| MARTINET (1962) ²⁰ | - communication and expression |
| SINCLAIR (1971) ²¹ | - statement, question, command and response |
| HALLIDAY (1969) ²² | - instrumental, regulatory, inter-actional personal, heuristic, imaginative and representational |
| BRITTON (1971) ²³ | - transactional (informative and connative) |

As Halliday's (1969)²² model is related to children's performance, I quote his summary, as an indication of the complexity of function. He writes :

"Let us summarise the model in terms of the child's intentions, since different uses of language may be seen as realising different intentions. In its instrumental function, language is used for the satisfaction of material needs; this is the "I want" function. The regulatory is the "do as I tell you" function, language in the control of behaviour. The inter-actional function is that of getting along with others, the "me and him" function (including "me and my mommy"). The personal

is related to this : it is the expression of identity, of the self, which develops largely through linguistic interaction; the "here I come function" perhaps. The heuristic is the use of language to learn, to explore reality; the function of "tell me why". The imaginative is that of "let's pretend", whereby the reality is created, and what is being explored is the child's own mind, including language itself. The representational is that "I've got something to tell you" function, that of "communication of content."

Page 34

8 Possible Research Methods

Function itself as a complete entity is enormously complex (as can be seen from the theoretical models given above), but it is possible, I consider, to extrapolate these functions which are most used in a school context, in order to study their linguistic correlates.

Ideally, samples of speech from subjects speaking in many transactions, demanding multiple locutions, each of which has a specific function, should be obtained before judgement should be passed on speech performance. To do this would be a formidable, long-term task for a team of researchers; for one person it is an impossibility. However, it is possible for one researcher, or a small team of researchers, to make a useful contribution to this vitally important area of human behaviour by studying and analysing either speech produced when one locution is held constant and a limited number of functions are varied, or the speech produced when one function is held constant and a limited number of locutions is varied. In this way the contours of a speech map for children of different ages and different abilities could be plotted incrementally. It will be a slow process, but, as it is a task which will be invaluable in the learning and teaching process, it is one that has to be done. At the moment, our knowledge of children's speech development and performance is rudimentary and inchoate, too generalised and simplistically interpreted.

9 Research Findings

With the time at my disposal, I cannot give you here an account of my research with school children and adults into function in speech. I will, however, give you a few of the general findings I made :

- * My findings reveal the rashness of assessing a person's speech from the results of only one function, or even a limited number of functions.

- * To generalise about speech production as a whole from the results of one or two functions in one locution is most unreliable.
- * It would seem that venn diagram would best represent intra-functional and inter-functional differences between individuals or selected groups of people.
- * There is a direct relationship between function and language on a scale of abstraction. Where the function is concrete, demonstrative and personal and where the concomitant linguistic planning can be governed by serial or spatial sequencing, the cooccurring language is relatively simple in terms of code elaboration. Where the function is abstract (e.g. reflective, ratiocinative, evaluative, inferential, etc.) and where the concreated linguistic planning must be controlled by a logical sequencing, the cooccurring language is complex.
- * Function has an architectonic power over language production.

10 *Implications of these findings for teaching and learning*

At present there is scant research evidence concerning the speech competency and production of children at various stages of their post-infant life. Consequently, much of the teaching of speech (and language in general) is based on teachers' intuition or subjective impressions gained from trial and error during their classroom careers.

At what age an average child is competent to produce language that is necessary to express certain functions at a high level of cognitive activity (such as speculation, hypothesis, evaluation, deduction, inference, etc.) has not yet been demonstrated by empirical research. The question of what difficulties, in terms of linguistic production, specific functions pose (especially those most frequently needed in schools) has also not been examined with research rigour. We do not know, for instance, whether in a relatively simple function such as description, the retelling of a story heard or seen presents more linguistic problems to a young child than does the recounting of a personal experience, or whether a question involving moral judgement poses more linguistic problems to a teenager than does a question involving impersonal generalisations.

We need findings from studies which contribute to an ongoing process to amass linguistic data on speech production related to a continuum of the functions most commonly used in the classroom and in the world in general. With this knowledge, I suggest, a structured, sequentially-more-difficult programme of functions can be produced whereby, at appropriate maturational stages in a pupil's development, the pupil could be guided by his teacher to use speech for functions that range from the simplest personal statement, involving basic linguistic competence and production, to functions which necessitate the highest levels

of abstract thinking and its concomitant complex structures and lexes.

I consider that "exposure" to language (the "total enrichment policy") is not as effective a method of teaching language as a methodical system of guidance by a teacher who is aware of a child's language development.

I believe that teachers should know the hierarchy of complexity of functions, in order that they may present finely-graded tasks to a pupil which will progressively challenge him linguistically but will not be so difficult that they will discourage him. Progression along a continuum of functions (in a variety of locutions and transactions) should make for an ever-increasing linguistic control by pupils and should ensure that pupils have plentiful experience of the use of language for abstract functions, which is a *sine qua non* of education at all stages beyond the elementary.

Allowing personal choice of speech (or for that matter written) tasks to pupils for a majority of lessons may well result in many pupils choosing the least difficult functions (e.g. personal description or narration). These functions are usually practised outside school and need refinement rather than induction. It is in schools, I suggest, that we should direct and encourage children (when they reach the relevant maturational stage) to talk in functions that generate complex language. This area of speech teaching is neglected in many schools.

If a teacher (including the teacher of English as a foreign language) feels that a specific linguistic feature needs to be emphasised and practised with a particular class, his knowledge of the language produced in specific functions will lead him to give the class those functions which will maximise the chances of the feature being produced. For instance, specific features could be taught or reinforced by using those functions which produce the feature as a high-frequency function-correlate. Specific features could be taught or reinforced without recourse to a series of drills. As O'Shea (1967)²⁴ said :

"A man is effective linguistically in those situations, and those only, in which he has often been placed, and in reaction upon which he has been constantly urged by force of circumstances to express himself readily and to the point."

Page 234

My findings have relevance, I suggest, to oral examinations. Some examining bodies present candidates with a list of topics and ask them to choose one on which they must speak for a few minutes. The topics often represent a variety of functions - which present highly-differentiated speech requirements.

The examiners should be aware that the amount of speech produced in the time stipulated and the continuity of the speech flow (i.e. the incidence of hesitation phenomena and mazes) will be governed to an extent by the function of the talk. Personal description may produce fluent, continuous, ample speech from one candidate, and the expression of a personal opinion on an abstract concept may produce much less speech which is often punctuated by pauses (filled and unfilled), recastings, etc. by a second candidate who is as competent in speech as the first candidate. It is suggested that in any oral examination the following conditions should obtain :

All candidates should be asked to speak where they use the same function or functions, so that all are tested equally.

If a choice of function is allowed, these candidates who choose the more abstract functions should receive some compensatory weighting of marks in the assessment.

It is suggested that cogent emphasis should be placed on the development and enrichment of vocabulary in schools, as it is in the areas of lexical variety that speakers are most clearly differentiated. Exact classification and specific and graphic attribution through qualification and modification should be stimulated, encouraged and promoted.

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